

SENATE BILL REPORT

SB 5385

As of February 15, 2009

Title: An act relating to design of public facilities.

Brief Description: Requiring a review of the embodied energy costs during the design of a public facility.

Sponsors: Senators Hargrove, Morton, Rockefeller, Hatfield and Shin.

Brief History:

Committee Activity: Environment, Water & Energy: 2/13/09.

SENATE COMMITTEE ON ENVIRONMENT, WATER & ENERGY

Staff: Jan Odano (786-7486)

Background: When a public agency determines that a major new facility should be built or renovated, a life-cycle cost analysis must be completed in the design phase of the project. The life-cycle cost analysis must conform to guidelines established by the Department of General Administration (GA).

A life-cycle cost is the initial cost and cost of operation of a major facility over its economic life. A life-cycle cost analysis includes, among other elements, an energy consumption analysis. An energy consumption analysis is an evaluation of all energy systems and components by demand and type of energy.

Embodied energy is a method for establishing the total energy required for a product or service. The embodied energy for building materials includes the energy used for gathering the materials for manufacturing the materials into products, and manufacturing, shipping, using, and disposing or recycling the manufactured products.

Summary of Bill: When a public agency determines that a major new facility should be built or renovated, a life-cycle cost analysis that includes a calculation of the embodied energy used in all building materials must be completed in the design phase of the project. The agency may accept the facility design if it is satisfied that the life-cycle cost analysis provides an efficient energy system and there was due consideration of the low embodied energy building materials.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

The guidelines established by GA for the life-cycle cost analysis must include a method for calculating the embodied energy used in building materials for construction of a major facility and identify simplified methods to ensure that low embodied energy building materials are used in the building design.

The life-cycle cost analysis must include the amount of embodied energy used in building materials of a major facility.

The term "embodied energy" is defined as the total amount of fossil fuel energy used to extract raw materials, and to manufacture, assemble, transport, and install the materials in a building.

Appropriation: None.

Fiscal Note: Requested on February 2, 2009.

Committee/Commission/Task Force Created: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony: Pro: Embodied energy should be considered in building material used for public building construction and renovation. Numerous studies conclude that embodied energy of building materials are equivalent to many years' worth of operating energy.

Con: There is no national metric for embodied energy, while it is a good goal, it is not viable or practical as a building requirement. Developing these standards would have to be done on a building by building basis, which would be costly.

Staff Summary of Public Testimony:

Persons Testifying: Pro: Kevin Godbout, Weyhaeuser

Con: Stan Bowman, American Institute of Architects

Persons Testifying: